

**REVISED SURFACE WATER SAMPLING PLAN**  
**ROUTE 113 RELEASE SITE**  
**LIMESTONE TOWNSHIP, KANKAKEE, IL**  
**WOOD RIVER PIPE LINES LLC**  
**ORIGINAL SUBMITTAL: MARCH 15, 2014**  
**REVISED: MARCH 17, 2014**

The following surface water sampling plan has been prepared for the purpose of evaluating surface water quality along the drainage paths near the pipeline release in Limestone Township, Kankakee County, Illinois.

Initial surface water samples were collected on March 14, 2014, at five (5) designated areas (Ditch Upgradient, Ditch Source, Ditch Limestone, Ditch 1955 Stone, and Ditch North) along the identified drainage paths between the release site and the Kankakee River. It should be noted that after the initial sampling event on March 14, 2014, these surface water sample locations were renamed SW-1 through SW-5, respectively. Sample location (Ditch Upgradient or SW-1) was collected from an upgradient location to serve as a background sample location point. On March 16, 2014, an additional surface water sample location (SW-6) was added to the surface water sampling plan, along Indian Trail; thus, this sampling plan has been revised to depict the inclusion of this sample location.

In general, the surface water sampling locations were selected based on the following observed drainage flow patterns:

- Surface waters upgradient of the release point flow in a northerly direction towards a drainage ditch that runs parallel to the south side of Route 113. SW-2 is located in this ditch in the vicinity of the release point.
- Drainage along the south side of Route 113 is directed approximately 500 feet west, until it flows through a culvert to the north side of Route 113 to an unnamed stream. This unnamed stream flows north along the east side of N 1500W Road, where it passes under the entrance road for Limestone Ridge. Surface water sample SW-3 is collected from this location.
- From the location of surface water sample SW-3, the unnamed stream flows north into a drainage culvert, where it eventually discharges to the north into the Kankakee River. Surface water sample locations SW-4 and SW-5 are located long this flow path.
- Surface water flow from the release point that is not contained in the ditch on the north side of Route 113 flows overland to the north, into a low-lying area in the rear of the property at 1460 Limestone Ridge. From this location, surface water flow is directed to

the east to a culvert along the west side of Indian Trail. Surface water location SW-6 was added at the location where the culvert flows east under Indian Trail.

The surface water sampling locations are depicted on the attached Figure, and may be further modified, with United States Environmental Protection Agency (USEPA) and Illinois (IEPA) approval, based on changes in surface water flow patterns observed during snow melt and/or precipitation events. Sample locations were marked with a stake/flag in the field and GPS coordinates will be acquired at each point so future sampling can be performed at the same location.

#### Sampling Methodology

Prior to collecting a surface water sample, the sampling technician will observe water flow conditions and look for evidence of free phase petroleum. If petroleum sheen is present, a sample will not be collected, and the observation will be noted. If petroleum is not observed, a sample will be collected for analysis using a dedicated bailer at each location.

Wearing appropriate latex gloves, the sample will be collected from the dedicated bailer into appropriate laboratory-supplied bottleware. For volatile organic compounds (VOCs), the bottleware will be 350 milliliter (ml) vials with hydrochloric acid (HCL) as a preservative. Polynuclear aromatic hydrocarbons (PNA) samples will be collected into unpreserved one liter amber jars. Immediately upon collection, the sample jars will be properly labeled with the sample location, date and time, and then placed into sample coolers with ice to keep the samples at a temperature below 4° C. Samples will be split with Agency (USEPA and/or IEPA) contractors if requested.

#### Analytical Methods

Surface water samples will be submitted for VOCs via USEPA Method 524.2 and PNAs via USEPA Method 624. Use of the USEPA Method 524.2 and Method 624 allows for the attainment of low laboratory method detection limits (MDL), generally 0.5 micrograms per liter (µg/L) for most VOCs. Future surface water samples will be submitted for similar parameters, although the suite of analytes may be amended based on review of analytical data for samples collected to date, pending submittal for review and approval by the Regulatory Agencies. The initial round of surface water samples were submitted for a 48 hour turnaround time (TAT). The frequency and turnaround for analytical results for future surface water sampling will be assessed based on the results of the initial sampling event.



# Route 113 Release Surface Water Sampling Locations March 17, 2014 @ 1700 Hrs

Scale: 1:8,196

